

STRAIGHT POLARITY METAL CORED WIRE

Abstract of Disclosure

A core composition of a metal-cored wire comprising a combination of graphite and potassium compounds has been proven to stabilize the arc in a straight polarity welding configuration. In particular, adding a combination of graphite and potassium manganese titanate ($K_2 MnTiO_4$) and potassium sulfate ($K_2 SO_4$) in the preferred combination of graphite and potassium compounds from the range of about 0.3% to about 5.0% wt resulted in a greatly stabilized arc, reduced spatter and reduced warpage while maintaining high deposition rates of the DCEN welding process.

Figures

Figure 1: A line graph showing the relationship between the number of people in a group and the time taken to complete a task. The x-axis represents the number of people (1 to 10), and the y-axis represents the time taken in minutes (0 to 100). The data points are as follows:

Number of People	Time Taken (minutes)
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90
10	100